

## Technical Data Sheet

# CROSflow® 840 Feather

CROSflow® 840 Feather is a polymer rich cementitious smoothing compound. CROSflow® 840 Feather is suitable for internal applications where a fast curing smoothing and patching compound is required to smooth over imperfections in concrete or floor underlayment. It is ideal for feather applications as it contains no sand. The high polymer content avoids poor strength due to dehydration on thin

applications. Installation of floor coverings can take place over CROSflow® 840 Feather approximately 15 min after placement, depending on the thickness. Requires no priming.

### Recommended Uses:

- Indoor applications
- Residential and commercial application
- New construction
- Refurbishment of old floors
- Underlayment for floor coverings after a maximum of 2 hours cure time

### Advantages:

- Can be applied from a feather coat up to a thickness of 5mm in one application
- Tear and rain resistant PE bags which are recyclable and reduce product loss from damaged packaging
- Highly accurate and consistent bag weights
- Excellent adhesion
- Exceptional flow and workability
- Trafficable in 15 min when applied as a feather coat
- Accepting of floor coverings once it is trafficable – from 15 min up to 2 hours depending on thickness – refer to Temperature Considerations

### Surface Preparation:

Concrete floors must be structurally sound, clean and dry. Surface must be free from dust, dirt, wax, grease, asphalt, latex and gypsum compounds, adhesives, paint, curing and sealing compounds and other contaminants which may act as a bond breaker. Concrete must be free from laitance, efflorescence and not be subject to hydrostatic pressure. Mechanically prepare the floor using recommended preparation methods



such as shot blasting, scarifying, diamond grinding, or other suitable methods to provide a roughened, clean, sound, solid and open porous surface.

Acid etching is not a suitable method of preparing the subfloor. Remove all dust and debris from the floor by vacuuming the surface with a suitable H Class industrial cleaner – must be equipped with a Hepa filter.

All concrete sub floors must be fully cured and dry in accordance with AS 1884 (Less than 75% relative humidity when measured in accordance with ASTM F2170). Ambient temperature, surfaces and materials should be maintained at temperatures higher than 10°C and below 35°C. For floors with a high humidity content or subject to rising damp, apply CROSflow® Moisture Vapour Barrier. Refer to the CROSflow® Moisture Vapour Barrier TDS for details.

Refer to Crosbe Technical Bulletin on Concrete Subfloor Preparation for detailed information on preparation of the subfloor.

### **Priming:**

Priming is not recommended or required prior to the application of CROSflow® 840.

### **Mixing:**

CROSflow® 840 hardens very quickly, so it is highly recommended that thorough mixing is carried out in the shortest possible time. Place the recommended 4.0 – 4.5 litres of potable water into a clean mixing vessel and whilst mixing, slowly add the entire 10kg contents of CROSflow® 840. Mixing should take place using a forced action high shear mixing paddle, with a mixer capable of stirring at 600rpm. Mix for approximately 2 – 3 minutes to a lump free consistency.

As you must use the material within 20 minutes after mixing, be sure to only mix a quantity that can be use within this period. It is suggested that mixing smaller quantities is a better approach. When mixing smaller quantities, ensure accurate dosing of water and powder is carried out using proper scales. For smaller mix quantities, use 0.4-0.45L of water for every 1Kg of CROSflow® 840.

- Do NOT overwater the CROSflow® 840, use only the recommended mix water volume.
- Do NOT use a concrete or masonry mixer to mix CROSflow® 840.
- Do NOT mix by hand.
- Do NOT attempt to retemper mixed product once the working time of 15 minutes has been exceeded.

**Application:**

Place the mixed CROSflow® 840 onto the prepared substrate and spread into place using a steel trowel. CROSflow® 840 is a soft paste consistency, so ensure proper pressure is applied to fill all voids in the surface. The CROSflow® 840 can be applied up to 5mm thick in one application. Thicker applications will require a longer cure.

The consistency of freshly mixed CROSflow® 840 is designed to allow for easy trowel application on a floor. If a thicker consistency is required for building up or use on a vertical surface, allow the product to stand for 10 min after mixing, and it will be at the desired consistency. If you require the fresh mixed material to be immediately ready for vertical surfaces, mix it at a water dose rate of 3.5L per 10kg bag (or 0.35L per 1Kg if smaller mixes are required).

**Set Time:**

For a feather application (< 1mm) allow a cure time of 15 min at 23°C for foot traffic. For thicknesses of 5mm, allow a cure time of 2 hours at 23°C for foot traffic. Once the product is ready for foot traffic, it is ready to accept any floor covering.

**Coverage:**

10kg bag of CROSflow® 840 will cover approximately 10.4-10.7m<sup>2</sup> at 1mm thickness, and 3.5-3.6m<sup>2</sup> at 3mm thickness.

**Clean Up:**

Wash all tools in water immediately after use.

**Temperature Consideration:**

The mechanism of interaction between cement and water is temperature sensitive. The set time is delayed at low temperatures and is accelerated at high temperatures. To avoid significant change in setting times, the recommended water temperature and ambient temperature ranges are:

Water Temperature Range: 15 – 25° C. Working with temperatures outside of this range will also impact the fluidity of the grout.

Ambient Temperatures: Do not grout at a temperature less than 10° C. Above 30° C, consider using cooled water for mixing the product. Do not grout in temperatures above 35° C

Substrate Temperature: Do not apply onto a surface which has a temperature less than 10° C or above 35° C.

## CROSflow® 840 – Product Data:

| Property                               | Test Result  |
|--|--|
| Working Time at 23°C                   | 20 minutes (at recommended water dosage)   |
| Fresh Mix Density (kg/m <sup>3</sup> ) | 1530   |
| Yield (L/20kg Bag)                     | 9.5L @ 4.5L water addition   |
|  | 9.8L @ 5.0L water addition   |
| Foot Traffic at 23°C                   | Approx. 15min for < 1mm thick coating<br>Approx. 1 - 2 hours for 5mm thick coating |
| Floor Coverings at 23°C                | Once able to foot traffic  |
| Application Thickness                  | Minimum: Feather edge  |
|  | Maximum: 5mm   |

*Testing Parameters: 22% of water. Laboratory at: 23 +/- 2 °C > 50% RH. The performance data is typical and based upon*

*controlled laboratory conditions. Actual performance on the job site may vary from these values based on actual site conditions.*

### Precautions:

- This product is designed as an underlayment and must not be used as a trafficable wearing surface.
- Do not use externally or in areas where the underlayment or subfloor is likely to be exposed to submersion, wetting or high levels of humidity

### Packaging:

10kg Polyethylene (PE) bags.

### Shelf Life & Storage:

#### Shelf Life

The shelf life of the product is 18 months from the date of manufacture, if stored indoors in accordance with recommended storage conditions.

#### Storage

Store in dry conditions, in unopened and undamaged PE bags and in temperatures below 30 °C. If stored in excessive temperature conditions, externally exposed to the elements or in high humidity conditions, the shelf life may be reduced.

**Safety Data:**

This product may cause irritation and an allergic reaction to the skin. It may cause serious eye injury and irritation to the respiratory system. In case of contact with the eyes rinse with running water (15 mins) including removal of contaminated clothing. Wear protective gloves, clothing, eye and face protection. Avoid inhaling dust/ fume/gas/mist/vapours/spray. Ensure adequate ventilation during mixing and application. A class P2 dust mask is recommended for use when handling powdered material, and whilst grinding or scabbling floors. For detailed information, refer to the SDS for CROSflow® 840, available at [www.crosbe.com](http://www.crosbe.com).

**FOR MORE INFORMATION ON CROSBIE PRODUCTS PLEASE CONTACT US:**

P: 1300 797 560

E: [info@crosbe.com](mailto:info@crosbe.com)

**Important Notice:**

A safety Data Sheet (SDS) is available from the Crosbe website ([crosbe.com](http://crosbe.com)). Please read the SDS carefully prior to using this product. In an emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia).

**Product disclaimer:**

Recommendations and advice regarding the use of this product are to be taken as a guide only. The manufacturer of this product and any of its affiliate companies cannot be held responsible for any loss or damage arising from the incorrect usage of this product. The use of this product is beyond the manufacturers control, and liability is restricted to the replacement of material should the product be proven faulty. The information contained herein is to the best of our knowledge, true and accurate. We reserve the right to update information without prior notice. No warranty is implied or given to its completeness or accuracy in describing the performance or suitability of the product for a particular application.